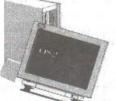


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## extended attributes

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#### COMMONT

# **Impersonal computing**

by Bill Schindler

It's been happening for a long time. The "personal" part of personal computers has been fading away over the last few years.

As a result, computing is threatening to become deadly dull, even to a dyed-in-the-wool geek like me.

What happened to the exciting, innovative personal computer? What happened to PC software that made you say "wow!" and got you to explore new ways of thinking and working?

Corporate computing, that's what.

IBM isn't the only company who makes obeisance to large corporate customers and all but ignores everyone else. Corel, for instance, cancelled their Java-based suite because large corporations aren't moving to Java in any big way. Even end-usercentric Apple is showing signs of listening more and more to corporate requests rather than the end-users.

Corporations buy software by the pallet load, so one corporate purchase order is worth 100 "normal"

end-users. The big money is in attracting and keeping the corporate customers.

The problem is that corporations tend to be cautious, conservative, and downright blind to a future any further out than 10:00am tomorrow morning. They don't see a need (or often a use) for innovations like speech recognition, or even technology like Java and network computers which are aimed square at their needs. Worse, their technical conser- do? vatism doesn't allow them to see a need for anything that's not already mainstream.

Corporations take years to evaluate new technology and more years to implement it. When they do roll out new software, that software is usually one or two versions behind what's current. (Many corporate OS/2 users are still using OS/2 2.1. Windows 3.1 is still prevalentwhich itself took years for corporations to adopt.)

So the big plodding conservative corporations are gaining control over the software that makes it to market. Not based necessarily on what they'll need in a year or two, but on what their near-sighted prognostication sees as a need for next week.

When the customers you've decided are most important to you say that they're not interested in your real innovations, that they don't need "cool," and that they have no use for the fruits of your research and development group: what do you

Software companies around the world are answering that question by reducing their R&D budgets, dropping the stress on innovative products, and producing sleepy me-too imitations of competing products.

The immediate result is boring, non-compelling software for those of us who take our personal computing, well, personally. The long-term result is that the computer industry may fossilize under the sediment of corporate computing.

# Phoenix OS/2 Society, Inc

The Phoenix OS/2 Society, Inc (POSSI) is an organization of computer users with an interest in IBM's OS/2 operating system.

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## on the bitstream Ringing the bell curve

by Esther Schindler

Writers talk with each other. Just as woodworkers share the joy of working with curly maple, and programmers exchange tidbits of code lore, writers share their experiences: struggling with the creative muse, editing frustrations, striving towards recognition... and the search for useful tools.

#### Word to the wise

For instance, one friend has a stockpile of Northgate keyboards, claiming that he never found another brand so suited to his needs. To him, they're as comfortable as an old pair of shoes. As Jeff pointed out, a keyboard is a very personal choice.

So is a word processor. For writers, who spend hours creating prose where once was only a blank page, a word processor must become second nature. It has to become so familiar that it becomes invisible. The "user interface" disappears, and the world becomes nothing but the thoughts in your mind and the words that appear on screen.

Thus, it didn't particularly surprise me when another writer expressed strong feelings about one word processor; tools that get in the way of creation are no tools at all. What did make me stop short was the nature of her objections. Accord- need. ing to Diana (author of several topselling novels), Microsoft Word is "a great program for computer illiterates, plain illiterates, and total morons" exuding a smug, Nazi-like attitude "which assumes that the normal user is a cretin who would be unable to write anything without constant hand-holding and instruction."

And that got me to thinking.

#### The march of progress

Once upon a time, computers were great hulking beasts that were cared for by specially trained staff with reverence and awe. Mainframes were kept far from ordinary people, and were owned and controlled only by large companies. To most, the computer was a remote, untouchable "a computer error."

The personal computer promised the opposite: immediacy instead of remoteness. Anybody could own a PC. A small business could afford one. You could even play with one at home. PCs were the essence of "power to the people."

#### **But which people?**

Personal computers have come down in price in recent years, but they are still expensive. Nor are they common; only 20-30% of American households own a computer, which is far from endemic. However, the dividing line I speak of is not a financial one.

Personal computers were grasped first and most urgently by people who loved technology. Delighted by what it could do, many didn't care about what the PC could actually accomplish. They'd spend hours typing in a BASIC program just to prove that the code would work, and they'd give little thought to the application's result. (Did they need to run a mortgage analyzer?) Even less attention was given to the user interface, because it was expected that every program would work differently; improvements would result from evolution, as users chose the interface that worked best for any

Early PC users were people who were (or quickly became) computer experts. They may have taken great pride in throwing away the manual, but that was because they believed they could learn the application better on their own. (Given the state of manuals back then, they were often right.)

As technology progressed, and the personal computer's influence grew, the focus shifted from the ham radio fan and his Apple //, to the business owner with an IBM PC and Lotus 1-2-3, to the "ubiquitous" PCs we see today. The first users cared most about the capabilities of the PC. The second batch were unintimidated by the technology, but were most interested in what they could do with it. The third category of tool, usually one that was blamed for users... well, they've been trained to think of the computer as something

they must own, even if it crashes more often than not.

Bill Gates' once laughable goal of a computer on every desktop (running Microsoft software or no) is now accepted as inevitable.

But was it ever a good idea?

#### **Tooling along**

In almost every endeavor, you can discern the difference between the tools of an amateur and those of a professional. My \$3 screwdriver does a fine job for the rare occasions on which I need it, but I've seen my father-in-law put in a full day's work on the farm, and I don't doubt the value of his top-of-the-line model.

You see this everywhere. My beautician has \$20 combs. A hammered dulcimer builder owns a drill press that gets used about ten times a year-but does the job right, each time. Even when you can't enumerate the details, you can see the difference between a household kitchen knife and a chef's cleaver, or the quality evident in a professional photographer's cameras.

Every professional also invests time and energy in learning to understand and use his tools safely and well. Professional tools always cost more, too-there are fewer people to buy them, but those people expect better quality to justify the higher price.

Where are the professional quality tools for computer users? (No, I don't mean software development tools; that market segment understands the difference between a novice's tool and a serious development environment. I refer to the users.) Why is Diana expected to use the same word processor for a 300,000 word novel as is used by an office ninny?

Some might argue that modern word processors are all of professional caliber, since they include every feature imaginable. But professionals don't generally look for feature lists; they want speed, dependability, and that ability to keep the tool invisible so that the real work can happen.

Nor is a long feature list especially welcome to a professional. A chef reaches for a paring knife that keeps its edge, not a Swiss Army Knife. My \$30 Oster blender has 16 speeds; the \$200 professional blender I really want has only twoand a 1/4 horsepower motor. Word processors that offer wizards, invasive spell checkers, and dancing paperclips get in the way of writing. If you need the handholding, that's fine; a wizard can help you learn the required sections in a business plan. But professionals don't need constant interruption from the tool. As Diana so succinctly said, "For myself, I find the existence of all this junk (rendered in fulsomely GUI terms) intrusive, coddlesome, and condescending."

The first tradeoff for all that soft- demand for Caphalon. ware "helpfulness" is speed. Swift operation is important for any profe- point out that the industry did try to sional; a busy photographer won't use a flash that requires 45 seconds to recharge, and a writer can't afford to wait on a word processor to keep up with her typing.

#### One size does not fit all

In the steady pursuit of attracting the business of every buyer, the computer industry has lost (or never recognized) the distinction between the different classifications of users. As a "power user" cook, I don't mind the existence of the inexpensive blender I'd find at K-Mart, because I can buy a professional class model that can grind fresh coconut effortlessly. The industry that provides cooks' tools doesn't assume that the inexpensive model is suited to every user, and they're happy to make money supplying different grades of tools. How has the computer industry managed to miss this seemingly obvious distinction?

Perhaps it's because the personal computer industry is so young that it has "matured with" the users it serves. When the typical computer user was a techie geek with an Apple //, the products were designed with their needs in mind, and the advertisements stressed the qualities that the "gee whiz" crowd would respond to best. As the market changed to encompass the business users who cared about productivity and didn't mind learning Ctrl+K Ctrl+D commands (because the payoff was so

compelling), the market adjusted to that new "middle of the road" user.

Now, with personal computers sold in the aisle next to refrigerators, the middle of the bell curve is expected to be a computer amateur who doesn't know anything about using the tool he's purchased or the field in which he'll be using them. When I was taught to type, I was also taught how to write a business letter. Word processor users are apparently not expected to know such business basics, because they're supplied with a half-dozen wizards to do the work for them.

But not everyone is in the middle of the bell curve. Oster may be popular, but it doesn't put Cuisinart out of business. Revereware is popular, but nobody imagines a lack of

Old-time computer users will address simple needs. WordPerfect marketed a low-end version of its full word processor, and Symantec created Just Write, a Windows word processor meant for those who didn't need more than the basics. They were meant to "play well with others;" for instance, LetterPerfect would read its big brother's files, retaining but ignoring the codes for advanced features like tables and math calculations. All such products failed, however, because they didn't grow as the user did. The first moment that a LetterPerfect user needed to create a table, the software became useless-it could no longer "do the job." My cheap blender can grind coconut-it just takes several batches, and eventually overheats.

(For that reason, I wholeheartedly endorsed OpenDoc. I liked the idea that I could plug in functionality when it became necessary, without filling up the hard disk with features I'd never use. I liked OpenDoc's promise despite its conflict with Esther's Cuisinart Blade Rule, which states: If you don't buy it when you purchase the original product, it's not likely that you'll purchase an add-on later.)

However, the problem was never novices who yearned for something simpler (and got a less capable product instead). The gaping hole is the needs of professionals (and those who share their values) who want something better. While the computer

industry has always been aware of the entry level computer user (partly because of the training tools that could be sold to them), it has never recognized the existence of the opposite end of the bell curve: the needs of the people who know what they're doing, are aware of what they want to accomplish, and want to use the best quality tools available.

Instead, the emphasis on the middle of the curve has insisted that everyone must use the same tools. It doesn't surprise me that the typical users bought into it (that was the idea, after all). As a result, your customers are surprised if you use anything other than Microsoft Word 97, and confused when you ask them to provide documents using anything other than the "accepted standard."

Because there's no alternative, professional computer users who seek quality are likely to choose older tools. Diana uses WordPerfect 5.1 to write her novels, and I don't blame her a bit. WordPerfect was never "easy to learn" but it was always my first example of "easy to use." The program is fast and it kept out of the way, yet an expert could get it to accomplish awesome things.

#### The missed market

That brings me, at long last, to the relationship between professional word processors and OS/2. I'm sure that you've encountered people who are surprised that you use OS/2, expecting you to use the latest version of Windows. The folks in the middle of the bell curve often believe that popularity equals value-when all it takes is a taste test comparing Velveeta to parmesan reggiano to prove otherwise.

Even though IBM has never explicitly marketed it as such, OS/2 is a professional's tool. It is best used in the hands of the power user, someone who is willing to learn about the tool in his hands.

In any industry, most marketing energy is aimed at "average user;" that's the largest portion of the market. Yet the competition is fiercest in that realm, and it may not be as remunerative as the "niche" market of the professional user.

I hope the computer industry recognizes the opportunity that's presented.

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# two warned

by Judy McDermott

Have you heard of the Soundoff events, sponsored by SofTouch Systems? Felix Cruz of SofTouch Systems and Mark Rudy, an OS/2 advocate, came up with the idea of holding IRC (Internet Relay Chat) sessions with OS/2 software vendors are discontinuing their Windows and with guests from the OS/2 com- version. Regardless, Communicator munity. Our next Soundoff is planned with Donn Atkins, IBM PSP's head of marketing. For details, see www.gt-online/~tandie/ soundoff.html.

# Communicator for OS/2

A Soundoff event was held on July 18, with Michael Kaply, Technical Lead (IBM), and Dan Libby, Developer (Netscape) of the Netscape Communicator/2 project team.

More than 85 people joined the hour-long Q&A session. Michael and Dan did an excellent job of answering questions directly; they seldom gave a "No comment" response. Here are highlights of the session; you can find a complete transcript at the above URL.

Michael opened by thanking everyone for attending and quickly followed with, "Rest assured. Despite anything you have heard, we are actively working on Netscape Communicator for OS/2."

Release date: They're working toward a third quarter ship date. A beta should be released by the end of August.

Development team: The team is made up of six IBM members, four Netscaper employees, plus some contractors. Everyone works together in one area. Company distinctions are mostly irrelevant; this is definitely a joint effort.

Improvements/new features: "We are trying to have at least the OS/2-specific features that were in 2.02, such as speech and additional drag and drop. FTP resume and nocookies option has been added. The same level of desktop integration provided by 2.02 and Windows has been maintained. We are certainly trying to make the OS/2 version better."

Java: Java is definitely seen as playing a huge role in the future of OS/2. IBM is actively working on Java performance. Although Netscape is working on a 100% Java client, they have not said that they will run on OS/2 either way.

For business or home? Michael stated that he sees it as just a browser. Dan Libby quoted a fellow Netscape employee, Bill Law: "Home app and for business applications."

Porting/coding: "We are certainly trying to keep a common code base with the Windows version. because that makes our lives easier. We have developed ways to leverage the Windows code as well as create a very OS/2 specific version and Open32 is not one of those ways. We are not using the Open Class Libraries. We have invented ways to keep us synced with other platforms and currently it is working very well."

Plug-ins: Communicator/2 will continue to support Windows 3.1 plug-ins. "We are definitely trying to get people to port to OS/2. RealAudio has been an uphill battle though, and I don't think you will see it happen." (As users, we can politely ask vendors to provide a plug-in. The last thing you want to do is to be rude to them, as this will just give OS/2 users a bad image and make them less likely to want to provide any type of

Availability: The team is working to make the software available from the Netscape page.

Netscape unofficial home page: The site maintained by Dan Libbyathttp://people.netscape . com/danda is your number-one place to check for news, screenshots, tips and tricks, and beta information.

Problems/bug reports: Send these through the normal support channels. The team does receive this type of feedback.

What can we do? First and foremost, provide support for the "team." Publicly bashing the team or products certainly does not boost the

morale of the folks that are working so hard to create what we want.

#### Warpstock '97

Will we see you at Warpstock '97? This should be one exciting event! It's a 100% volunteer effort, and we still need volunteers to make this an OS/2 users event to remember! Visit www.warpstock.org for the latest details, along with a full list of the ISVs and speakers that you'll see at Warpstock.

Be sure to check out the early registration specials. This will certainly save a few pennies and enter you into a special prize drawing. Registration, travel, and lodging information is available at the above URL.

IBM will attend Warpstock '97. The following excerpts were taken from an August 1 press release.

IBM representatives will demonstrate the latest developments of "Project Bluebird," the common term for the next release of OS/2, on the showroom floor. A session will be devoted to positioning Project Bluebird for use by corporate users, SOHO users, and Internet users.

IBM's James Koerner will be on hand to address the audience and discuss the OS/2 Warp strategy, how customers can take advantage of Warp to move quickly to network computing, and why that is good for business.

Indelible Blue has committed to attend Warpstock '97. Indelible Blue is the premier source of OS/2based solutions, providing a full line of programs from end-user applications to industrial-strength development tools and networking software. They also handle OS/2-related hardware, books, and accessories.

#### Tip time!

This will speed up folder objects. Go into folder properties "View" page. Select "Multiple columns." Go to "Sort" page. Select "Always maintain sort order."

Well, that wraps it up for this month. So much to say, so little space! See you in November.

# Stardock announces Power Gamer 97 for OS/2!

Stardock Systems announced Power Gamer 97. Power Gamer comes with four of Stardock's OS/2 games, all for only \$99.95. The bundle includes:

- O Galactic Civilizations II
- O Star Emperor Advanced
- O Avarice: The Complete Saga
- O Trials of Battle

#### **Galactic Civilizations II**

Stardock's flagship OS/2 game, Galactic Civilizations has won numerous awards, including "Best Strategy Game" and "Game of the Year" from the Internet PC Top 100 Games survey.

In Galactic Civilizations, you take command of your space-faring civilization. As you expand your empire into the galaxy, you encounter alien races not all of which are friendly. Use diplomacy, technology, and military might to win the game either through uniting the galaxy or conquering it. The game features a multithread artificial intelligence that many have said delivers the best computer players in any PC game.

#### **Star Emperor Advanced**

Where Galactic Civilizations required your diplomatic and resource management skills, Star Emperor brings out the darker side. In Star Emperor you must crush your opponents through ruthless military tactics. Capture key resources on different planets and exploit those advantages to bring your enemies to their knees.

#### **Avarice: The Complete Saga**

You get not only Avarice: The Final Saga but also Avarice: Preview. This two-part adventure finds you visiting your mysterious uncle, trying to solve the mystery of his disappearance. The mystery will eventually encompass the entire world!

Avarice is a virtual reality game that boasts incredible 16.8 million color graphics and true world interaction. While it has similarities with Myst, Avarice allows you to manipulate objects in many different ways. An apple can be bitten, cut, burned;

The mansion's library has real books that you can read.

#### **Trials of Battle**

Trials of Battle is a first person action game. Trials of Battle puts you into the drivers seat of a powerful hover tank, as you advance from level to level destroying your opponents.

Unlike other first person games, Trials of Battle sports a top notch AI that plays like real people. The enemy does not gang up just on you; they battle each other as well. A true 3D game, Trials of Battle plays like a combination of Mech Warrior and Wing Commander. It also has excellent multi-player options over TCP/IP.

With Power Gamer 97, you get strategy, action, and adventure rolled into one! Power Gamer 97 can be ordered from Stardock's Web site www.stardock.com, or via phone at 1-888-STARDOCK. Power Gamer for OS/2 is \$99.95 and now available. ©

# New standard for Web robot guidance

An independent group of Internet developers are creating an improved standard that will enable the "Robots" used by World Wide Web and Internet search engines to become more effective.

Improved standards allow search engines (such as Webcrawler and Alta Vista) to improve their ability to collect information from the Web. That improvement will help make Web "surfing" easier and more productive for Web users. A draft proposal will be written in September. From the response to the draft proposal, a formal standard will be produced at the end of the year.

#### "Bots" make the Web work

Web robots, commonly known as "bots," are a major part of what makes the web what it is today. The most common Web robots are the computer programs used by search engines to "crawl" around the Web. The pages that these "bots" find are indexed and saved for later queries

by Web users. The robots explore links from the indexed pages to other pages, eventually traversing most of the Web.

## The Robot Guidance Project

With all of these wandering robots, an enormous amount of information is gathered and can be quite difficult to organize effectively. Duplications, temporary pages and confusing information all add to the complexity of the task. Sometimes a Web site developer does not want pages to be examined by these robots. In other cases robotic searches could be inappropriate or misleading to the automated software. An expired draft standard, commonly referred to as "robots.txt," allows authors to provide some help to robots that visit their site, primarily by forbidding pages from being indexed. The Robot Guidance Project is working to update that standard and make it more useful.

The Robot Guidance Project will provide standards and guidelines that enable Web authors to assist robots that visit their Web site. The standard will consist of hints to the visiting robots, in addition to required guidelines for those robots. Hints will help robots determine such things as where copies can be found should the web site become unavailable, which pages are home pages and which are subject to frequent change. Required guidelines will include items such as which pages the author does not want to be indexed.

The project is being developed by people who have an interest in the efficient indexing of Web sites. The Robot Guidance Project welcomes assistance and ideas from members of the Web community, particularly those charged with designing web robots and the administration of large Web sites. Interested persons should contact the Project Coordinator, Shawn Steele at shawn@terra.org.

## Keature Confessions of a system tinkerer

by Julian Thomas

I've never built a machine from scratch, but I've never had a machine that I didn't extensively modify. My first IBM PC (remember the PC1?) had 160KB drives and Easywriter. It eventually ended up with a V20 chip, 360KB drives, a clock, a Sigma card (for more memory), and additional IO ports.

Julian Thomas is a retired IBM engineer and programmer who uses OS2 for almost everything; he, his wife Mary Jane, and Matinicus (a red Maine Coon cat) now live in the beautiful Finger Lakes Wine Country of New York

#### Historical musings

When I moved up to an XT, I bought a bare machine, added a Seagate drive (20 whole megabytes-wow!) and an EGA adapter and monitor from another store. There was great rejoicing in the household when the noisy power supply died and I was able to replace it with a PC Power & Cooling SILENT model.

I sat out the IBM PC AT with its hard disk horrors, although I did have one on my desk at work for a number of years with no problems other than ECD failures.

When it became time, at home, to move from the '88 series to a 386, I contacted Washburn & Co in Pittsford, NY; Clyde Washburn was then active in the IBMHW forum on Com- ATI PCI video card (I would have puServe, and was a custom builder of reused the Number 9 VLB card, but systems based on AMI motherboards. That machine started out with a 105meg RLL drive; by the time I ran out of space, RLL was so far out of favor that I couldn't find a matching drive to add to the string, so ended up with a Maxstor 235 MB and an IDE card. I also replaced the EGA (that had been moved over from the old XT) with an ATI ISA SVGA card (and a new monitor also); this was the point when I moved directly from DOS to OS/2 2.1 (having had no desire to move to Windows), and maxed out the board with 8 MB.

The next upgrade was to replace the motherboard with a newer AMI 486-DX2 board (again, from Washburn & Co); at that time PCI was not firm so I went with VLB. At this point I was sitting with an unused motherboard and one computer in a two-user household. The solution was to buy a cheap tower case (the

386 board was larger than would fit in most available AT style cases), a new Number 9 VLB SVGA card, a new monitor, an extra keyboard (Lexmark), a CDROM drive, and a larger Maxstor drive. The result was two OS/2 computers, each one part old, part new. Eventually the 486 machine was further enhanced with additional memory and a second, larger Maxstor IDE drive (I'd read that it's prudent to not mix drives from different manufacturers on an IDE string), as well as a HP scanner.

#### Finding OS/2 hardware

The most recent upgrade (last year) was not totally without trauma. While Washburn supports OS/2 and ensures that his systems will run with OS/2, I wanted a wider selection of hardware than they had to offer.

I connected with Ron Shafran from Farrel Company. The company specializes in building OS/2 systems, and Ron is active on the OS2USER. forum on CompuServe. We planned the next upgrade: AMI board with Pentium Pro 180 (the prices on the 200's were insane at the time); an by then there weren't decent VLB motherboards available!), 32 MB of memory, two new Fujitsu IDE drives, and a beefed up PC Power & Cooling power supply, to replace the smaller one in the AT case. (That's the one originally selected for the 386.)

When the brown truck delivered the goodies, there was a small problem. The motherboard was certainly small enough for the old AT case, but the power regulator for the Pentium stuck up from the board, colliding with the 5.25" hidden hard drive bays. The solution was simple (only requiring additional time and money!): a PC Power & Cooling midsize tower case with a built-in tower power supply. These cases are not cheap, but are dramatically better made than the inexpensive ones.

Happily, I was able to return the AT style power unit.

This is my primary machine these days. Subsequent upgrades have included another 32 MB (the memory leaks in OS/2 Warp 4 drove me to it), and a generic sound card with an ESStech chip (which came with one of the most atrociously written manuals I've seen in years).

At this point, Mary Jane was getting increasingly impatient with the leisurely performance of her 386. I transplanted the 486 motherboard. the Maxstor drives, and the Number 9 video card into her system. I had to buy a mouse, since the ATI card had come with a bus mouse; the Mouse Systems white mouse is one of the nicest I've used, and I have since added one to my own system. I backed up her data directories onto diskettes, and then moved the data onto the still-viable OS/2 Warp Connect installation on the hard drives

#### Picking up the pieces

That left me with all the hardware for a 386 system sitting on the floor, missing only a keyboard and a video display! I put it all together in the AT case, and borrowed a display and keyboard from one of the other systems. I've reformatted the drive to FAT and installed DOS and Windows 3.1, in hopes of selling the system for a few bucks. (So far, no takers.)

When it comes to buying hardware (and I've certainly done plenty of that, as you can see), my approach is to stick to AMI boards and other top-rated hardware, where OS/2 support is available one way or another. I check for hardware that doesn't get negative comments in the fora or on Internet newsgroups and lists. I deal with suppliers for system boards and most items who are OS/2 aware (or better). And I do not hesitate to open up the case and fiddle with the cards and connections.

Clyde Washburn no longer sells to end users; they referred me to "Chips for Less" in Dallas who also handle AMI boards, at 972-252lent source for systems and components; Ron configured another

0009, but I have no experience with Pentium system for a friend who was rshafra@ibm.net or call 919-833them. Ron Shafran has been an excel- extremely satisfied with the process. 6899. To reach him, you can write to

TALL MORTH VINE A CARNOTT

keature.

compiled by Mike Briggs

These are companies that are known to be "OS/2 friendly." We realize that this is by no means a comprehensive list; however, it should be a great start for anyone who is planning on building or buying a new OS/2 system.

#### **Complete systems**

Company	Phone	FAX	Email	Web site
Indelible Blue 3209 Gresham Lake Rd Suite 135 Raleigh, NC 27615 USA	919-878-9700 800-776-8284			
Computer Central 140 Coffee Pot Dr Suite E-102 Sedona, AZ 86336 USA			zbass@ibm.net	Brush Bulk Bulk Bulk Bulk Bulk Bulk Bulk Bulk
J3 Computer Technologies 8851 Central Ave # G-316 Montclair, CA 91763 USA	909-985-6786 800-787-0930		sales@os2store.com	

#### The OS/2 preload list

For a list of companies that will preload OS/2 on your computer see http://budgetweb.com/os2/preload.html

#### **Video subsystems**

Company	Phone	FAX	Email	Web site
ELSA, Inc 2231 Calle De Luna Santa Clara, CA 95054 USA	408-919-9100	408-919-9120	Programme sugar sugar gramme superioritations in	www.elsa.com
Matrox Graphics Inc 1055 St Regis Blvd Dorval, Quebec H9P 2T4 Canada	514-969-6330 800-361-1408	514-969-6363		www.matrox.com/mgaweb /home.htm

#### OS/2 Soundcard summary

See http://ezinfo.ucs.indiana.edu/~rodsmith/sound.html for information on making various sound cards work under OS/2. Includes pointers and contact information for card manufacturers.

# the president's corner Corporate thoughts

by Lee Baldwin

Ever since POSSI members were asked to summarize their concerns for the upcoming meeting with IBM executive Mike Lawrie, I've been trying to formulate a response. The best that I can come up with (even if I have a hard time articulating is), is "Where is the support for OS/2?"

For quite a while, IBM's contention has been that it focuses on corporate America. Well I live in corporate America. As a consultant and data processing professional here in Phoenix, I have worked for American Express, APS Palo Verde Nuclear Power Plant, Pharmacutical Data Systems (PDS), Blue Cross Blue Shield, PCS, and Syntellect. You probably recognize these companies; except for Syntellect (which makes software for the corporate market), they are not exactly small firms. These companies live and die by computers and information systems.

All of these companies use OS/2. Sounds good, right? However, as I see it, they are all talking about what they can replace it with!

#### Moving away from OS/2

American Express is the sort of company that will probably adopt the Java based network computers for the desktops of the non-programmers; currently those users have

Windows. American Express is the kind of company that IBM expects will go to Java because of the cost savings. But what are the programmers using? As far as I can tell, since the PC programmers used Microsoft development products in school, they want Windows NT. (Many of them have the privilege of using Windows 95, right now.)

At PDS, my contract came to an end when the CIO made the decision to get rid of OS/2, including the OS/2 servers. Their stated intention was to move to Windows NT.

At Blue Cross I was one of the few people in my area using OS/2. As a MicroFocus OS/2 user, I pretty much had to support myself.

At PCS they have given up on MicroFocus COBOL and OS/2; they are going to IBM's VisualAge COBOL on Windows NT. I emailed the analyst responsible for the VA COBOL set up to ask why he'd chosen Windows NT; his response was to the effect that they were standardizing on Windows NT, so there was no reason to use OS/2.

At Syntellect, a company that has been shipping OS/2 as the primary operating system for their product for the last four years, they have determined that they are going to start shipping Windows NT machines! Why? The VP of Marketing says that their customers require it; the sales force says that the OS/2 requirements loses them a sale a

week. Is it that a company like Syntellect, that markets OS/2 products to corporate America, does not have the support from IBM to inform their customers why OS/2 is a vastly superior operating system? Or maybe IBM itself doesn't think that OS/2 is so superior?

So my question to Mike Lawrie is: If IBM wants to market primarily to their corporate customers, why don't I see it? Why don't I see the effects of that marketing and support of OS/2 at those corporate clients where I have worked? Or are companies like American Express not important enough?





# September meeting Mike Lawrie to speak

by Esther Schindler

We OS/2 users have plenty of questions. We want to know what IBM is doing to enhance the technology. We're intensely interested in IBM's marketing strategy for the operating system. And we're especially interested in the plans the company has to serve our needs.

On Tuesday, September 9, we'll have the opportunity to get straight answers from the guy in charge.

The guest for the Phoenix OS/2 Society's general meeting will be J. Michael ("Mike") Lawrie, the General Manager of the IBM Personal Software Products Division (IBM PSP). That's the big kahuna, the top dog, the big cheese. Lawrie is responsible for management of the PSP division and for the marketing and development of the OS/2 Warp family of operating system products. That includes OS/2 Warp, OS/2 Warp Server, and Directory and Security Server for OS/2. He was named to the position in January 1997.



#### Straight talk, real issues

This isn't going to be a media circus event. No fancy hotel, no unusual arrangements. (Well, we will have brownies or a chocolate cake to celebrate the tenth birthday of OS/2... but we would have done that anyway.) This is simply Mike, talking with individual OS/2 users.

Because Mike Lawrie wanted to address the issues we care about

most, I asked Society members to submit suggestions ahead of time. In early August, I sent the "top ten" list to Lawrie's staff; he's promised to focus on these topics.

In case you're wondering what topics are on the "What matters most" list for our members, here's the top three items:

- O IBM: Get serious about OS/2.
- O What's up with Windows sup-
- O Where does IBM stand with OS/2 in the small-office/homeoffice (SOHO) markets, and with small and medium businesses? Other topics prominently mentioned
- O Support developers;
- O Single input queue;
- O Support for SMP (symmetric multiprocessing)
- O Device drivers
- O OS/2 pre-installed on IBM computers
- O Multimedia support
- O Speech recognition.

Perhaps most importantly, Lawrie has a reputation for speaking directly and honestly. If you think that this meeting will be full of "typical company hype"... think again.

#### **About Lawrie**

Before Mike Lawrie took over as general manager of IBM PSP, he served as general manager, industries, IBM Asia Pacific Service Corporation (APSC), where he was responsible for IBM's largest customers in Asia Pacific.

He also served as vice president, software, for IBM APSC and was responsible for the development of a sales, marketing, and channel development organization for IBM PSP, Software Solution Products, and Network Software products in the Asia Pacific region.

Previously, Mr. Lawrie was vice president and general manager, Great Lakes Area, IBM North America, with P&L responsibility for IBM's sales, marketing, services, administration and technical support organization in the Great Lakes Area.

Prior to that assignment, he was assistant general manager for IBM's United States field organization. In that role he was responsible for developing IBM's approach to planning, organization, compensationm and the strategy implementation for IBM's field force in the U.S.

Since joining IBM in 1977, Mr. Lawrie has held multiple marketing and financial management positions in both line and staff organizations.

He holds a B.A. degree in history and political science from Ohio University. He also holds an MBA degree in marketing and finance from Drexel University. Mr. Lawrie is a graduate of the Dartmouth Institute and holds a financial planner certification from the Wharton School.

## **General** meeting

#### what

▲ Mike Lawrie, IBM PSP General Manager

#### where

▲ Mountain Preserve Reception Center 1431 E Dunlap Phoenix, Arizona

#### when

▲ Tuesday, September 9, 1997 ▲ 6:30pm: Q & A session ▲ 7:00pm: Regular meeting

## history Comina events

September

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October

SMTWTFS

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November

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December

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January

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SMTWTF

This is a list of events scheduled by the Phoenix OS/2 Society. Unless otherwise noted, active members may attend any scheduled event for free.

#### **Meeting notes**

For the latest updates on the Society's event calendar, check the Web site at http://www.possi.org.

For meeting information and other queries, call the Phoenix OS/2 Society's voice mail at 602-949-4341.

If you have suggestions, ideas, or comments on the content of general meetings, contact the Society's Program Chair, Esther Schindler, at the general meetings or send email to esther@bitranch.com.

#### September 1997

- 2 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 2 Developer's SIG. Meeting is 6:00pm to 8:00pm. Coordinator Lyle Wilson. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 5 Magazine submission deadline for October issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.
- 9 HOW (How OS/2 Works) GIG. Meeting is 3:30pm to 5:30pm. Coordinators Rosey Rosenwald and Stan Kropen. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
- 9 General meeting; IBM PSP General Director Mike Lawrie. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
- **27** Board meeting and magazine prep. Meeting is 10:00am to 1:00pm. Eat a brunch, learn about the inner workings of the Society, and help get extended attributes ready to mail. Location: Bill and Esther Schindler's house in north Scottsdale.
- 29 OS/2 Marketplace conference committee meeting (and unofficial FOOD—"Friends Of OS/2 Dineout"-SIG). Email Rosey Rosenwald at robert@perfectniche.com for location, time, and cuisine.

#### October 1997

- 5 Magazine submission deadline for November issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.
- 7 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 7 LAN SIG; Tivoli. Meeting is 6:00pm to 8:00pm. Coordinator Elliot Abramowitz. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 14 HOW (How OS/2 Works) GIG. Meeting is 3:30pm to 5:30pm. Coordinators Rosey Rosenwald

- and Stan Kropen. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
- 14 General meeting; Lotus Domino Go Webserver (tentative). Meeting is 7:00pm to 9:00pm. O&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
- 24 Warpstock in Los Angeles, California. Visit www.warpstock.org for details.

#### November 1997

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- 4 Developer's SIG. Meeting is 6:00pm to 8:00pm. Coordinator Lyle Wilson. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
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- 11 HOW (How OS/2 Works) GIG. Meeting is 3:30pm to 5:30pm. Coordinators Rosey Rosenwald and Stan Kropen. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
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- 22 Board meeting and magazine prep.
- 24 OS/2 Marketplace conference committee meeting.

#### **December 1997**

- 2 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 2 LAN SIG. Meeting is 6:00pm to 8:00pm. Coordinator Elliot Abramowitz. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 5 Magazine submission deadline for January issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.
- 9 HOW (How OS/2 Works) GIG. Meeting is 3:30pm to 5:30pm. Coordinators Rosey Rosenwald and Stan Kropen. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
- **9** General meeting. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
- 20 Board meeting and magazine prep.
- 29 OS/2 Marketplace conference committee meeting.

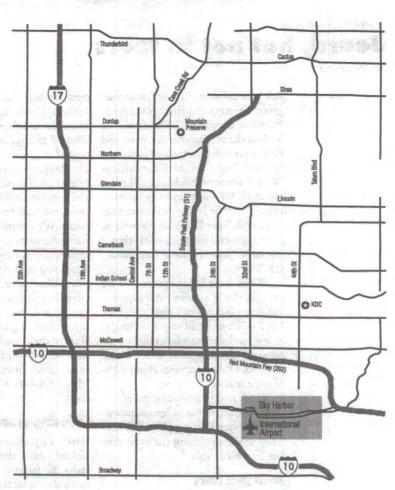
# **Meeting locations**

General meetings are held at the Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

From the Black Canyon, exit at Dunlap and head east. From the Squaw Peak, exit at Northern. Go west to 12th Street, turn right and go north to Dunlap, turn right, and it's two blocks up on the right.

The "How OS/2 Works General Interest Group" now meets at the Mountain Preserve Reception Center on the afternoon of the general meet-

The Internet SIG, Developer's SIG, and LAN SIG all meet at Knowledge Development Center, 2999 N 44th St, Suite 400. That's just north of Thomas, in the building with the green dome. Plenty of free parking space is available in the garage behind the building.





If the mailing label on the

back cover says "sample,"

then this may be the only

attributes that you will

ever receive. If you want to keep getting the magazine

(and receive all the other

benefits of membership), you

must join! A 12 month mem-

\$30. (See the form for mem-

areas.) Tear out the applica-

tion form, fill it in, and mail it with the membership fee to the Society's address.

bership in the US is only

bership pricing in other

copy of extended

#### LAN SIG

by Elliot Abramowitz, elliota@indirect.com

It was necessary to cancel the August LAN SIG which was scheduled to cover Tivoli. Our guest speaker, Gil Day, was called out of town at the last moment. The topic is rescheduled for the October meeting, when we will have the opportunity to learn Tivoli's OS/2 strategy.

#### **HOW GIG (How OS/2 Works)**

by Stan Kropen, skropen@ibm.net

Although the August 12 HOW GIG continued to experience low turnout, a couple of attendees benefited from the presentation.

Stan Kropen continued with the Mesa2 demonstration that Ernie Fisch began two months ago by creating a few loan amortization spreadsheets. The actual formula, rather than the @function, @PMT, was used. A REXX program, which computed the monthly payment based on user inputs such as loan amount, annual interest percent, and number of years, was also shown.

We're actively seeking a new meeting day and time, because Tuesday afternoons don't seem to be good for any of us. If you know of a possible meeting site (available on a weekday evening), we'd love to know.

Also, to improve interest and attendance we solicit your input. What subjects would you like presented?

What is the best day, time, and location? Please email either Rosey Rosenwald (robert@perfectniche.com) or Stan Kropen (skropen@ibm.net).

#### net.sig

by Mike Briggs, mike@possi.org

The last meeting was well attended and, thankfully, the Internet connection worked with no problem.

We demonstrated how to set the -3 in the Netscape/2 program object's parameters, which make Web sites think you have version 3 running. (Because the Windows and Macintosh versions of Netscape didn't support Java until version 3, some sites check the browser for its version number; they don't work correctly unless you're using version 3 or later.)

Talk then turned to Fix Pack 1 for OS/2 Warp 4. Since we had a fast connection, we tried the update install of FP1 off the web. It was impressive! I started the remote install from the Web page, ps.boulder.ibm .com/softupd.html. Files were quickly downloaded and installed. The program cleaned up the temp files and told me to reboot. It was done, quickly and easily. (I've got to get a cable modem!)

Next time, it's news readers for sure. I'll show PMI-News, and Duane Pruett will demo the ProNews beta. See you on September 2, at the Knowledge Development Center!

# Lastmonth Board, but not to tears

by Joel Frey

Are boards boring? Is a software user group meeting the right place for a hardware demo? At the July meeting we had the second one this year, and both were informative and pertinent to OS/2. Last time, Max Eidswick of WaveRunner technologies talked about ISDN and telephony issues in general. At the July general meeting, Avi Singh from ELSA Inc showed us their high-end graphics cards that, not coincidentally, have very good OS/2 support.

While most hardware vendors are chasing the Windows bandwagon, some vendors haven't forgotten that OS/2 still owns millions of desktops. A few hardware vendors take it very seriously. In Germany, where ELSA is based, OS/2 comprises about 15% of their market.

ELSA makes a wide range of products, including video conferencing hardware that supports OS/2. They are just entering the mass mar- Here's a tip from Avi: When you ket for video cards.

#### **Dual monitors**

The most interesting offering from ELSA is the dual monitor configuration in which a single desktop is dis- one. played over two monitors; that is, half of the desktop is on one monitor and half on the other. Although this seems gimmicky at first, it has practical value for CAD and other applications.

The major constraint on productivity using a monitor is the myopic view limited screen real estate offers. Even when the window and its contents can be resized, the choice is one of viewability versus visibility. The drawback to the dual monitor configuration is that it requires two cards as well as two monitors.

What distinguishes one video card from another? Since various manufacturers frequently use the same chips, Avi said ELSA's difference is that they are a technologydriven company. "Twenty six percent of our resources-and we have 400 employees, including those who assemble and ship boxes—are devoted to engineering. Eighty percent of that is devoted to software. That way, we can guarantee that our drivers are not only easily installable and very stable, but they have speed and good performance on all platforms. We actually have more software engineers than many [competitors] have employees." According to Avi, ELSA also puts extra attention on the quality of their software content, including the utilities; "that's what eighty-three engineers are sitting there, working on." Most of their hardware engineers have been with ELSA since the company started fifteen years ago and "they know how to build graphics cards."

#### Choosing graphics cards

look at a card, the smaller it is, generally the faster it is. The longer you make the signal travel, the slower the card will be. Check out the real estate on the board. Buy the smaller

As OS/2 users are painfully aware, there are a lot of video cards out there, but very few of them have decent OS/2 drivers. Some put up with crummy drivers to use a good card and others use a lesser card because it has good drivers.

In addition to making good drivers, ELSA will also upgrade them for future releases. "If you bought a board three years ago for OS/2 Warp 3 and are now upgrading to OS/2 Warp 4, we would get you the drivers for that."

OS/2 support is included in all ELSA's future plans; they have two developers working on OS/2 full time. The company will be releasing an EnDive utility for AVI and MPEG-5 soon, in addition to a list of other utilities I didn't catch.

#### The product line

The ELSA product line for the general office/home market consists of the Victory 3-D which is intended for and bundled with some games, the Winner 2000 AVI 3-D, and the Winner 1000. The high end of the line consists of the Winner 3000 series which comes in the small. medium, and large sizes as the 3000-S with 2MB of EDO RAM that supports up to 16M colors at 800 X 600, up to 32K colors at 1152 X 864, and 256 at up to 1280 X 1024; the 3000-M with 2MB of VRAM and 2MB of EDO RAM at the same resolutions and colors, but at higher refresh rates; and the Winner 3000-L with 4MB VRAM and 2MB of EDO, supporting 16M colors at up to 1280 X 1024 and 32K colors at up to 1600 X 1280.

One interesting thing he mentioned, as he put up a comparison chart of ELSA products against competitors, is that this material comes marked for internal use only because direct comparison advertising is illegal in Germany. It's hard to imagine how advertising in the U.S. software and hardware markets would look without such comparisons, although it is frequently misused.

#### **Door prize**

ELSA provided one of their Winner 3000 boards as a door prize. There were other things too, but everyone had their eye on that board. At least it went to a good home. Rosey Rosenwald won the video card, although he initially thought Esther, who was manning the virtual hopper in Bill's absence, was pulling his leg. Rosey was in a great mood later at Coyote Springs. If you want to find out more about ELSA video cards, ask Rosey or visit ELSA's Web site at www.elsa.com.

# Lettore Input queue

Letters to the editor should be sent to editor@possi.org, or mailed to:

Editor, extended attributes Phoenix OS/2 Society, Inc. 5515 N 7th St. Ste 5-133 Phoenix, AZ 85014-2585

We reserve the right to edit all letters for content, readability, and length.

Just received the August issue of extended attributes and was surprised to see my game mentioned in "random bits." Thanks for putting it into extended attributes!

I showed it to my kids and my seven year old daughter, Monica, was disappointed to not see her name in the article. After all, she said, she chose some of the pictures and tested the game! (My wife's only comment was: "They didn't mention the price." Now you know what her pri-

Before I published this game, I mentioned to my daughter that I will soon "sell" this game to other people. She was all upset and said: "No Dad, don't do it, I want to play with it." My daughter now knows what selling books and software means!

I thought the readers of extended attributes might be interested in a recent contact I had with IBM. While looking at IBM's PSP Tech Docs on the web, I came across doc# 4180314, a form for performance

tuning LAN Server. It states that you need Excel to use the form. This recieved this: bothered me, so I sent an email to Lou Gerstner pointing it out, and wondering if Lotus was aware that IBM required a customer to use Excel. Here's a excerpt of the reply I received from someone in his office:

"Regarding your question on PSP Technical Document # 4180314, you were asking if Lotus is aware that copy of OS/2, an OS/2 user who is IBM requires its customers to buy Excel. This requirement is for much older versions of LAN Server and the newer releases of Warp Server and Warp 4 comes with the tuning device included with the software and Excel is not required.

"If you would like to upgrade to Warp 4.0, we can send you a Not For Sale copy for your home use."

I took them up on their offer of a Armin Schwarz free copy of OS/2 (what OS/2 loyalist wouldn't?) but was rather dismaved at the handy way they brushed off my concern. I assume there are still quite a few LAN Server sites running older versions. In confirmation of my

acceptence of the free copy, I

"Thank you so much for your response. I have sent your request for Warp 4 second day mail Airborne Express. ... I will go ahead and close your concern with IBM, but if you have any problems, please feel free to contact me."

So IBM tries to buy off, with a concerned about how IBM markets OS/2 and the implied messages it keeps sending to the public. And they wonder why Windows is the dominant OS!

Well, I'll keep using OS/2, in spite of IBM, and hopefully they'll eventually see the light. Oh, I do plan to follow up on this with them.

> Tom Rowe Network Administrator University of Wisconsin Center for Dairy Research

## vress release M licenses Word

Monotype Typography announced that IBM has licensed Monotype's WorldType font solution for inclusion across a variety of IBM hardware and software products, including use with OS/2 Warp products.

WorldType is a font set which conforms to Unicode standards and provides worldwide language support. WorldType is designed to be a flexible font solution that will fit the needs of a variety of users, particularly software developers, and publishing professionals. Monotype has developed an extensive library of Latin, non-Latin, and extended-Latin fonts over its 100 year history in the publishing industry. Utilizing the strength of Monotype's non-Latin library, WorldType was developed to support the world's lan-

guages and scripts in a single font, or set of fonts, conforming to Unicode standards.

Monotype provides WorldType to each of its customers by working closely with each of them to implement their required language support. Monotype typically provides WorldType with a base level of language support and provides additional complementary Unicode font modules which support a specific set of languages as necessary. The baselevel WorldType font supports the following scripts and languages: Pan-European Latin, Cyrillic, Greek, Hebrew, and Arabic.

Monotype can supply additional script modules to support all of the world's scripts. IBM required a font that contained one graphic represen-

tation for each Unicode character that they support for Pan-European Latin, Greek, Cyrillic, Hebrew, Arabic, Indic, Thai, Vietnamese, Japanese, Simplified Chinese, Traditional Chinese, Korean, and extended symbols that are present in their legacy systems. Monotype provided IBM with a single font that contains the characters necessary to support all of these scripts and languages.

In addition to licensing the fonts for use with IBM OS/2 Warp products, Monotype licenses the core fonts to Microsoft for Windows, as well as to Sun for their Solaris operating system, and to Apple for several of their language kits.

## building blocks DOS boot

by Marilyn Pizzo

By now, you're familiar with the many virtues of OS/2 Warp. But what happens if you have a favorite DOS application you can't do without, or you need a Windows 3.1 application for a special project? It's often not practical to own two separate computers. Happily, OS/2 Warp allows you to address the situation very easily. This month, we'll take a look at OS/2 Warp 4's DOS and Windows support.

#### It's there, right?

The first step is to be sure the DOS and WinOS2 support has been installed on your computer. For this example, I will assume that these features were not installed when you uncheck the box. first installed OS/2 Warp. (In all likelihood, you do have support installed, but it doesn't hurt to learn about the process.) Let's go through the Selective install process to add these features. It really isn't difficult. offered if you are installing OS/2

Open the OS/2 System folder, then System Setup. Look for the Install/ Remove folder and open it. Start the Selective Install utility. You will see the System configuration screen. Since you are not changing any hardware, you do not need to change any of these settings. Select Next. Choose the Advanced installation option at this point; this gives you more control over what is installed on your system, with more options.

The next screen you will see is the Installation Drive Selection. Since OS/2 is already installed, it should show you the CD ROM drive from which you originally installed OS/2. Accept the drive if it is correct. Next you will be asked to select the file system you wish to use. Whichever you are using, FAT or HPFS, don't change it now. Just accept what OS/2 is telling you. DOS and WinOS2 work well in either format. Continue through the screens until you find the OS/2 Setup Installation window.

When you the "DOS and WIN-OS2 Support," pay attention to the bottom right corner of your screen; be sure you have enough disk space available. Check the box in front of

OS/2 DOS Support and then click on the More box to the right of that line. Be sure each individual item is checked. Do the same after checking the box in front of the WIN-OS2 Support. Sometimes the most needed features are listed in the More section, and are not checked to be automatically installed.

Finally, select the install button. You will be asked if you want to add existing programs to your desktop. By default, OS/2 Warp will search all the logical drives to find existing applications; it will create icons for those it finds, and place them in folders on the Workplace Shell desktop. If you do not want Warp to search,

You will notice two other options on this screen: migrating existing configuration files, and editing and viewing the results at the end of the installation. These options are Warp 4 over an existing OS/2 Warp

You have now completed all choices you need to make regarding installing the operating system. You will now be asked to select networking components, which you can skip for the DOS/WinOS2 purposes. From here, you need to be sure your Warp 4 CD-ROM is in your CD-ROM drive and let your computer do the rest.

Some of these steps seem unnecessary, but you can use selective install to add many different features. That means a lot of steps.

#### **Installing DOS applications**

Now that you know you have DOS support, you can install those special applications. Let's start with DOS apps. Insert the diskette or CD-ROM in the appropriate drive. From your Desktop, open OS/2 System and then open Command Prompts. From here you can select DOS Window or DOS Full Screen; I always choose the Full Screen option.

At the C prompt, type the letter of the drive where you inserted the diskette and press Enter. Now you can type Install (or whatever the command is for installing that par-

ticular application); Follow the instructions that came with the program to complete the installation. When you are done, and back at the C prompt, remove the diskette from the drive. Type Exit, then Enter, to close your DOS session. Close all windows to get back to the Desktop. That wasn't so bad but now you probably want to use that applica-

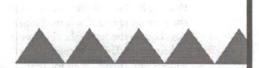
If that's the case, we need to find the program icon. Most DOS programs do not create a program icon on the Desktop during installation so you must play "in search of." To do this, open OS/2 System and System Setup. Select the Add Programs utility. You have two choices now:

- O If you select "Add new programs," OS/2 Warp will search your entire computer looking for applications. If you are installing a lot of new applications at one time, this is the best option.
- O If you select "Search for and select programs to add" you can choose specific drives to be searched and program types to be added. You are presented with a list of the applications that are found and you can decide if you actually want to add them to your desktop. This is the faster method if you only need to search selected partitions, or if you are searching for a particular type of program: DOS, Windows, OS/2.

The Add Programs utility will only add new programs, ignoring any programs already on the desktop.

In our case, we have installed a DOS program and need to find it so it will appear somewhere on the Desktop. We know it was installed on the hard drive. At the Search for Programs screen, highlight only the C: drive (or the drive on which you installed the software) and mark the DOS programs box only. Then select OK. OS/2 Warp will search that drive for new DOS applications. Highlight your application from the list. OS/2 will, more than likely, place the icon in the DOS Programs folder. It will have the ordinary folder picture. I personally get bored





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Fax: 910-350-2937

Email: bmt@bmtmicro.com Compuserve: 74031,307 Web: http://www.bmtmicro.com



with all the icons looking the same. It is quite easy to change the picture.

#### Changing icons

Make sure that you have a clear view of the icon that you want to change. Right click on the icon to get the pop-up menu. Click on Properties. Locate the icon tab; click on it, to bring it to the foreground. You will see the current icon for that application as it is displayed.

If you click on the Find button, OS/2 will search your hard drive for all icons (any file name ending in .ico). When the search is over, you are shown a wide variety of icons available. Some may not be appropriate since they are unique to another application, or the picture may just not be indicative of your specific software. You can usually find something you like. When you do, highlight that picture with one click and then push OK. You should see an immediate change in the way the current icon looks. Close the properties window and you are done.

#### **Adding Windows** applications

To add a Windows application, you follow the same procedure. This time, you install the software through a WIN-OS/2 full screen session. Then run Add Programs. You might not need to change the look of the icon. Most Windows applications have unique icons so you may not want to change it.

It isn't very hard to set up your system with the applications you use. I would recommend that, if there are several applications you wish to add, you install all or at least some of those applications before going through the Selective Install procedure to cut down the time for all the searches. It is not difficult but it is a little time consuming.

Hopefully, you now have a small concept of how easy OS/2 Warp 4 is to use for everyday things. Some of us may be "power users" but just as many of us simply want a reliable operating system to get us through our everyday activities: word pro-

cessing, spreadsheets, games, etc. Now you know how to add your favorite old software applications to your favorite new operating system.

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# OS/2 Shareware BBS moves

by Pete Norloff, Sysop

lion calls, the OS/2 Shareware BBS has moved from Fairfax, Virginia to Oakton, Virginia. As luck would have it, even though the move was only 21/2 miles away, the BBS had to change phone numbers.

Effective immediately, the new phone number for the OS/2 Shareware BBS is 703-242-4482. This one number is used for both subscribers and non-subscribers.

Even if you don't plan to call the BBS soon, please check your dialing bbs.os2bbs.com (to access the

After seven years and well over a mil-directory and anywhere else you store phone numbers to make sure that you record the new number instead of the old one. Service to the OS/2 Shareware BBS is home to to minimize the number of modem sions. Subscriptions help keep the

> ble through all the same Internet addresses: telnet://

BBS) and www.os2bbs.com (through the Web).

Online since March 1990, the old numbers will be disconnected 16,200 OS/2 files totalling over 4.6 soon. (I'd hate to be the person who GB. Freely available to everyone over gets the old BBS numbers—let's try multiple phone lines and telnet sescalls going to the old number and service online through its T1 connecwaking up some unsuspecting soul.) tion and give users access to the file Of course, the BBS is still accessi- collection through the Web.

# Dress release

JP Software has announced major updates to all six of its award-winning command line tools, including 4DOS, 4OS2, 4NT, and Take Command for Windows and OS/2! The new release includes 4OS2 version 3.0, 4DOS 6.0, and Take Command for OS/2 2.0.

For OS/2 users, 4OS2 replaces CMD.EXE (the program that displays the "OS/2 Prompt") with a much more powerful and flexible command line. It includes enhanced command line editing and history, over 50 new commands, and dozens of additional features designed to make the command line a flexible, fun, and productive tool. 4DOS offers similar features for DOS users. and is optimized for use in OS/2. DOS sessions. Take Command for OS/2 is a complete OS/2 Presentation Manager implementation of the same command line technology used in 4DOS and 4OS2.

In addition to their role as interactive command line tools, these products offer hundreds of enhancements for use in batch files, ranging from logic processing (IF / THEN /

ELSE, GOSUB, DO loops, etc.) to over 100 functions which perform system status checks, basic string processing, arithmetic calculations, date and time manipulation, and many other similar tasks.

Among the major new features in this release are Extended Directory Searches, which allow you to change to a directory anywhere on your system by entering only part of its name.

New commands include:

- O OPTION: Offers complete config- company's sales offices at 800-368uration adjustment through interactive dialogs or on the com-
- O SWITCH: Provides for "case' statements in batch files.
- O TOUCH: Adjusts file dates and
- O TREE: Displays the directory tree, with or without file names, in a variety of formats.

New file exclusion ranges provide a convenient way to exclude files from any internal command.

A unique new batch file debugger can execute each line step by step, process or trace into additional batch files, and display variables, aliases, and expanded commands at each

These are just a few samples of more than 150 new features!

Each product is \$69.95 plus shipping. Multiproduct bundles are available (e.g., the OS/2 pack includes 4OS2 and 4DOS, at \$89.95). Upgrades for current customers are \$29.95 for the first product and \$19.95 for each additional product. The company also offers a "CD Suite" with all six products at \$119.95.

For more information, visit JP Software's web site at www.jpsoft.com/, or contact the 8777 or 617-646-3975 (use area code 781 instead of 617 after September 1).

## review

# Using VisualAge for C++

by Joel Frey

One of the most difficult things for a traditional "dinosaur" programmer is making the conceptual leap from earlier programming styles to an object-oriented approach. I've had to accept the fact that, at least at the application level, programming is slowly but surely evolving into a design and implementation process. The portion of programming consumed by writing and testing code has dropped remarkably, which has been the essence of programming for many of us.

Prentice Hall \$49.95

Visual Programmer's Hand-

VisualAge for C++,

book

It's equally difficult to keep up with the rapid introduction of visual development tools, which have been pouring onto the market at a good Dale Nilsson and Peter Jakob clip for several years now. (Then they fade away, as the limitations overshadowed their marketing hype; some products seem to survive on sheer momentum.) Most visual tools use a similar approach to defining the user interface. They create at least a skeleton of functionality to support the event-driven operating environment which is their forte, and where the lion's share of all new development is happening. It's the functional stuff underneath that has the greatest variability and, consequently, the lowest level of automation. Despite predictions and promises, improvements have been

#### **Visual Programmer's** Handbook

slow in coming.

VisualAge is IBM's current line of visual, object-oriented development tools. It is already available for C++, BASIC, SmallTalk, and by the time you read this, Java. Originally, I planned to write this as a review of a teaching book on the use of VisualAge for C++, but it's hard to discuss the book without discussing the software.

Although I earn a living as a programmer, my knowledge of visual programming tools is limited to VX-REXX and some Visual Basic exposure. My C and C++ experience is also limited, but in my capacity as a rent-a-geek, I recently inherited an application that includes some C++ modules in need of immediate work.

Since I needed to improve my skills in this area (that is, develop some). I impulsively agreed to review Visual-Age for C++, Visual Programmer's Handbook, by Dale Nilsson and Peter Jakab, before I realized how much time was involved. Because the book assumes a knowledge of C++ and I needed to brush up on it for my job, I simultaneously worked my way through Stanley Lippman's C++ Primer again. Fortunately, I did not have to write any code until Chapter 3, which is a testimony to this product's potential.

#### **Trials of software**

This book comes with a 60-day trial version of both the OS/2 and Windows 95/NT versions (on separate CD-ROMs), a trial version of DB2 for each platform, and some applica-

A minimal installation, in which some components are pulled from the CD-ROM when needed, requires 130 MB for OS/2, and 300 MB for Windows 95/NT. The full install requires 250 MB for OS/2, and 400 MB for Windows 95/NT. Part of the difference is because the Windows version includes the source code for the OpenClass Library. The Windows version can't be installed on Windows 3.1, but generated applications will run there (with some limitations and a little setup work).

Although the book is subtitled A Visual Programmer's Handbook, it is actually a training manual. It's not designed as a primary reference; it has no appendices or pull out reference material.

For cross-platform portability, VisualAge contains the Open Class Library. By defining the application using these classes, you could presumably port the definitions to other VisualAge products and platforms, although generic definitions often come with a performance penalty. The Holy Grail of application generators is the ability to define a solution and be able to create a functioning version of it in any target environment, regardless of operating platform or programming language. The obstacle is always those parts that

defy easy definition and practical code generation. That's where the coding part comes in.

One benefit of visual development tools is their utility for Rapid Application Development (RAD). RAD is the process of iteratively adding functionality to an application, as it goes from prototype to production. This book uses the iterative development cycle to take the reader from simple to more complex material, and it works quite well. The reader is led through the development of several sample applications, ranging from a text box with exit functionality to a database viewer with update capability. None of these projects is very difficult, but they demonstrate the use of VisualAge C++ in digestible chunks; no application spans more than a few chapters. I have used other books that gradually enhance a single application. I prefer this book's approach because minor problems in earlier versions of an application tend to turn into trouble later on that has little to do with the subject matter.

#### Rapid development

Iterative development has been around since the early days of programming; it is the ability to quickly change the definition and regenerate the application that makes RAD practical. With visual tools, the graphical (and more recently, database) interfaces can be prototyped, well, rapidly: a few minutes for a simple screen and datastore.

Like a movie set, the prototype is largely a facade with many visual tools, because the internal processing and interface code between the parts are not defined to the tool. Until recently, the ability to change the application in substantial ways after the prototype stage was difficult because you needed to adapt and supplement the handwritten portion to later versions of the generated code. As these products evolve, increasing amounts of internal functionality and connective tissue can be defined and generated by the tool. VisualAge seems to have made a good dent in this area. Although it

still doesn't go beyond generating stubs for anything complex, the generated stubs do provide better adapt- tell them, then you tell them what ability of the user-written code for subsequent iterations.

Part of this book's appeal was to get hands-on experience with Visual- ally possible to determine its Age, at least for the trial period. Fortunately, I acquired a licensed OS/2 version as a door prize (provided by IBM) for the POSSI developer's SIG. I put off the review through most of the trial period, while I worked my way through the C++ Primer (again). When I finally got to the first code generation, I received a warning that the trial period had expired.

The "nmake" utility, which automates the compile and link process, is invoked from a command session. When I tried to use it, I got a message that said "Could not make ... " the application name. Assuming that this was due to the expiration, I installed the licensed version; it had the same problem. As it turned out, I hadn't changed to the directory that the application was in (duh!). A simple reminder to change directories would have been appreciated. I lost several hours in this episode.

#### Sensible progress

This book is well thought out in terms of how and when it introduces new concepts and material. Although an understanding of C++ is a prerequisite, the authors review basic concepts, but not until you build and enhance the first application.

They use the architecture of the Open Class Library as a vehicle for explaining the VisualAge parts structure, which consists of visual, nonvisual, and class interface parts (which they subsequently refer to as "class parts," adding unnecessary confusion since all parts are classes). The class interface parts are the connective tissue referred to earlier and add greatly to the power of this product, although, as we find out in the last chapter, they come with a performance penalty.

The chapter layout is good and increasingly standard for books of this type: a preface that describes what will be covered, a summary at the end of what was covered, and where necessary, a review of earlier material. To paraphrase Mark

Twain, "First you tell them what you're going to tell them, then you you told them.'

Although terminology occasionally pops up out of nowhere, it is usumeaning from context. In Chapter 3, "attribute" is used in a way that suggests that they are referring to class member data types, as opposed to the member functions of the classes. A mere seventy pages and two chap- I'm unsure of the level of portability ters later, this definition is explicated. I hate to quibble about such things, but when you're dealing with new material, the use of multiple terms for the same thing creates additional confusion. My first reaction is to start backtracking on the assumption that I wasn't paying good attention and missed something. (I do realize how difficult it is to present well-understood material to the unlearned; some of this is probably a consequence of using terminology for the sake of brevity, or because it better describes the product's view of a component.)

#### **Debugging features**

In talking with people who have experience with other C++ tools in addition to VisualAge, I've heard that the VisualAge Debugger is one of its best features. This book devotes a chapter to using the trace and debug facilities which are, in my book, the core of any decent development system.

The Source Level Debugger lets you see source code in a tree view, then select the source for a member function within a class. While the concept of having separate windows for monitoring the source, data, and program status are common even in mainframe tools, it's much more complicated when you have the possibility of dealing with multiple threads. One feature I thought was particularly cool was the "Step over" button, which lets you invoke another function without also having to walk through its code (or set breakpoints in order to return to the area of interest), since you usually know where the problem is not occurring.

#### **Cross platform support**

Out of necessity, the book is littered with notes on the differences

between the OS/2 and Windows versions. These are primarily procedural differences at the generation and implementation stages; very few are in the actual application definition process. Each has its strong and weak points. It's hard to tell, without hands-on experience, which has better usability. If IBM made any tradeoffs in favor of Windows, it's not apparent here.

Cross-platform is the watchword. for completed applications, but the differences in use and functionality seem to be small enough that the Windows version wouldn't seem totally different. I'm pleased to report that there seems to be no (technical) reason to go there.

The final chapter is devoted to all the loose ends associated with building and implementing VisualAge applications. These include: making a DLL; making a Resource DLL (for bitmaps and icons); externalizing strings to avoid recompiling for text changes; saving window size and position; implementing and using the class browser: Windows 3.1 implementations; performance tips; multithreading support (none to speak of); multimedia, DDE, OLE, SOM, drag-and-drop support, and development group version control. These are all very important subjects which I'm not ready to tackle yet.

#### Hey, good book!

Overall, this is an excellent book. The material is well-presented and covered thoroughly. This is a great way to get hands-on experience. The book would benefit by the inclusion of a glossary and appendices with reference material, but there's a ton of reference information in the installed product (along with a 60-day limit).

I can breathe a little easier now. Not only do I have this review out of the way, but I've had a good look at what I hope is pretty much the stateof-the-art in development tools. It's powerful, but still requires a lot of plain old programming to get good performance and manageability.

As a dinosaur, I know there's a comet someplace in my future, but it's not here yet. I might still make it to retirement without flipping burgers. (I was looking for a good vegetarian metaphor but I came up empty).

# random bits

# **Connectivity and developer tools**

compiled by Esther Schindler

Every month, we print notices of new and improved OS/2 applications and utilities. Here's this month's batch.

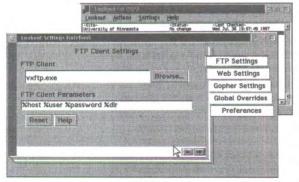
#### e Db

Simple Software Solutions' e Db is a small-footprint, embedded database engine that allows professional developers to create database applications written in C, C++, Visual Basic, or Java. e Db is fast, reliable, portable, and flexible. It supports SQL '92 standard data types. The callback mechanism simplifies complex programming, e Db supports full database transactions with Rollback and Commit operations, e Db is compiler independent and can be distributed with your applications on a royalty-free basis. e Db provides safe multi-threaded support under Win32 and OS/2.

Full details about e Db, and a fully-functional evaluation copy, can be obtained at www.simple-sw.com. These include the entire set of online documentation books and tutorials. e Db is available for Win16, Win32, OS/2, Visual Basic 3-5, Java, and DOS.

#### Lookout

Lookout for OS/2 is an internet noti- WarpRadio fier. It watches Web, FTP and Gopher sites, and tells you if anything has changed. You can tell Lookout how often it should check a particular site, how to notify you when something at the site changes, and what Lookout can ignore.



Lookout is shareware, with a registration of \$15. It's available as look100.zip at BMT Micro,

www.bmtmicro.com. You can learn more at the author's home page, www.primenet.com/~ckennedy/ software/lookout/.

#### **Mac file system** access utilities

Hfsutils is a collection of tools for accessing Macintosh HFS-formatted volumes. HFS is the Hierarchical File System used on modern Macintosh computers.

This first release of hfsutils for DOS, Win32, and OS/2 is a port of Robert Leslie's HFS utilities for UNIX systems. There are two binary versions of the package: one for Win32 and one for OS/2. Both versions also run under DOS.

hfsutils is free software, available from www.student.nada.kth.se /~f96-bet/hfsutils/

For OS/2, you also need to install the EMX runtime, available from ftp.leo.org/pub/comp/os/os2 /leo/devtools/emx+gcc /emxrt.zip

For Windows 95/NT, you need the RSXNT extender, available from ftp.uni-bielefeld.de/pub /systems/msdos/misc /rsxnt131.zip.

WarpRadio controls the Radio Active FM Radio Card. It is a small program that lets you set volume and stations on the radio card right from your OS/2 desktop. WarpRadio is freeware which you can acquire from the Warped Code Cellar: http:// ourworld.compuserve.com /homepages/aschw

This radio card was sold through Microwarehouse in 1994 by Novex Industries. Before you download WarpRadio or search through your mail order catalogs, you should be aware that the card is no longer sold, Novex is nowhere to be found. However, if you own the RadioActive card, then you can have a native OS/2 program to control it. (Send the author e-mail if you use Warp-Radio, as he's anxious for feedback.)

If you use the Reveal FM radio card, you might want to note a similar utility that's available. The filename is PMR102.ZIP and it has been seen (at least) at the OS/2 Supersite (www.os2ss.com).

#### Tunnel/2

Tunneling allows data to be securely passed between a Master and another computer over a public network, as if the two were connected directly on your LAN.

The Tunnel doesn't just send the data: it intercepts your TCP/IP traffic, encapsulates it, encrypts it, and sends it on a socket to the other end. Once the data reach the final destination, the packets are reconstituted, and decrypted into a readable form.

F/X Communications' has just released Tunnel/2, which it says is perfect for Virtual Private Networks. You can build private dialup networks using the Internet.

Measure it against the cost of expensive leased lines! Tunnel/2 saves your company real money and saves you any worries about the confidentiality of conducting your business online.

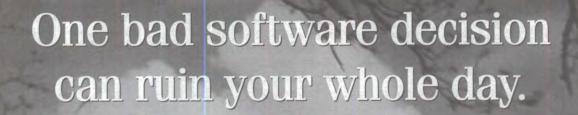
You can tunnel your traffic point to point. For example, let's assume that you want to work at home, in a setup that exactly matches that of your work. Get the same security, use the proxy set up at the office, use the calender in the company intranet, etc. That is possible with Tun-

Tunnel/2 lets you pass protocols via nonconforming networks. The IPV6 (Internet Protocol Version 6) is often tunneled over IPV4 (Internet Protocol Version 4-current ver-

Tunneling can work over other networks, such as X.25, but that requires special support from F/X Communications. (Don't hesitate to ask for support!)

Tunnel/2 has two modules: A Tunnel Master and a Tunnel Slave.

The Tunnel master is installed at the corporate network, behind the company firewall. The Tunnel slave is set up at a remote site. The Master has Internet access via the corporate LAN and the slave(s) typically via a dialup solution.



Let's face it. When it comes to choosing the right utilities for your OS/2 system, you can't afford to take risks. You need a proven set of disk, file, and desktop utilities which are reliable and effective. One that supports multigigabyte partitions, HPFS and FAT file formats, long file names, with both PM and command line utilities. With qualified product support representatives accessible from the internet, compuserve, phone or fax.

What you need is the SofTouch Suite family of OS/2® utilities from SofTouch Systems, Inc. Our disk and file utilities improve system performance with HPFS and FAT defraggers, repair damaged INI files and user desktops. fully uninstall applications, move applications across different partitions and manage hundreds of thousands of files in directories and drives spanning multiple gigabytes of space. Our software repairs damaged partitions, rebuilds corrupted desktops, and recovers critical HPFS data files - everything you need to maintain your custom OS/2 system.

Call SofTouch Systems and ask for the SofTouch Suite. We've been helping users like you since 1991 and OS/2 1.1.

800.944.3028 405.947.8085 FAX 405.947.8169



SofTouch Systems, Inc. 1300 South Meridian, Suite 600, Oklahoma City, OK 73108-1751

http://www.softouch.com



Tunneling gives remote sites full and cost-effective access to the corporate brain. The main features are:

- O Enable TCP/IP connections to live through disconnects and even PPP served address changes
- O A static IP number reachable by the Tunnel Master
- O Two way Dial-On-Demand
- O Low resource usage
- O Text mode applications, controllable via Telnet
- O Auto configurable networks. The Tunnel Master learns about the slaves as they connect and update corporate routing tables accordingly.
- O Scalable networks. Drop in extra Tunnel Masters at demand Password authentication using encrypted 3-way handshake
- O DES encryption of data (separate product)
- O Custom security via an obtainable plug-in DLL.

Other plug-ins, such as compression DLL's, can be ordered at F/X.

Tunnel/2 costs \$35 for a single license: a five-user license starter kit, \$150. Quite a few other price points are available; check F/X Communications' Web site at www.fx.dk/tunnel.

#### OmniBasic for OS/2

Computer Design Lab announced OmniBasic version 1.27. This release includes a number of new features including SELECT/CASE, CON-TINUE, RANDOMIZE, and comprehensive XForms support for the Linux version. In addition to its unrivaled portability, OmniBasic has shown itself to be the one to beat in recent benchmark tests for speed and efficiency. There are also many changes which accommodate the QB/PB style syntax making conversion much easier.

OmniBasic is portable to Linux, OS/2, DOS, Windows 95/NT, OS-9, and OS-9000. The shareware versions are available for download from BMT Micro.

OmniBasic is a structured dialect of Basic which includes such features as true pointers, based variables, macros, C compatibility at the function as well as the linker levels, and a host of other advanced features. Like many C compilers, but unlike other

Basic compilers, OmniBasic was written in itself. In other words, the source code for OmniBasic... is OmniBasic.

#### MasterGear

MasterGear is a Sega Master System/Game Gear emulator. The OS/2 version is available at:

www.geocities.com/~spiceware

#### EXT2-OS2 version 2.40

ext2-os2.ifs is a file system driver that allows OS/2 to seamlessly access Linux native partitions (ext2fs partitions) in both read and write modes. Once installed, Linux partitions appear as standard OS/2 drive letters, one per Linux partition. It is a port of the original Linux ext2fs kernel code.

ext2-os2 can be used without Linux, as it can format or check ext2 file systems directly from OS/2. It includes a port of the Linux ext2 file system utilities version 1.10 (e2fsprogs-1.10), including e2fsck, mke2fs, and debugfs.

You can find the software at the ext2-os2 home page at www.geocities.com/ SiliconValley/Bay/5313. Contact the author, Matthieu WILLM, at willm@ibm.net.

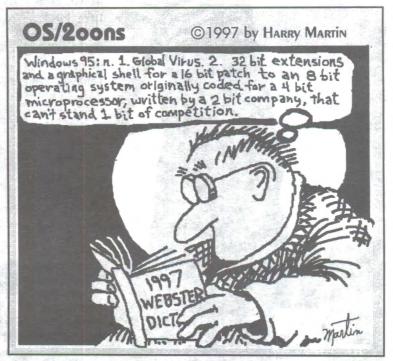
#### File Commander/2 v1.51

File Commander/2 is a 32 bit text mode file manager in the tried and true Norton Commander style. Its main features include built in archive support, powerful user definable menu, built in text viewer and editor, tree views, and easy creation of Workplace Shell objects in addition to the usual copy, move, delete, and directory browsing functions.

New features include:

- O Search & Replace in editor added.
- O Full support for volumes larger than 4GB (up to 2 ^ 63 bytes).
- O Added Skip and All options to "Directory exists, merge with source?" warning.
- O Added function to create new archive (Shift+F5).
- Enhanced directory compare with date/size/contents options.
- Option added to delete confirm dialog to force delete files like "DEL /F" does.
- O Ctrl+Shift+J copies current file name to the clipboard.

It's available from BMT Micro and Hobbes.



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# The Phoenix OS/2 Society, Inc

The Phoenix OS/2 Society is a computer user group dedicated to OS/2. We have been publishing our award-winning magazine, extended attributes since August of 1994, and we have members all over the world.

Yes, this is a user group publication, and that sometimes shows; however, that's also an advantage, since you get real-world feedback about OS/2 and OS/2 products from other users, not just jaded, cynical journalists.

How useful will it be to join the Phoenix OS/2 Society if you aren't in Arizona? We see the Phoenix OS/2 Society as something akin to the National Geographic Society or the Smithsonian; while most members only see a magazine, you're actually a member of a society, and can participate in its activities when you happen to be in the area.

Even without activities that take place in Phoenix, Society membership includes product discounts that alone could make membership worthwhile. Taking advantage of one such discount could easily save you the entire cost of membership, giving you a "free" subscription.

Plus, the Society is prominent in the computing community. We are *already* heard by IBM; they listen to what we say. Several IBM executives get extended attributes. They don't get it for the "club news"—they use it to learn what OS/2 users really care about. And they respond to what they read.

You're not just getting a magazine. You're getting a voice.

If you would like to continue to receive the magazine, fill out the membership card in the center of the magazine. We would love to have your voice join ours!



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